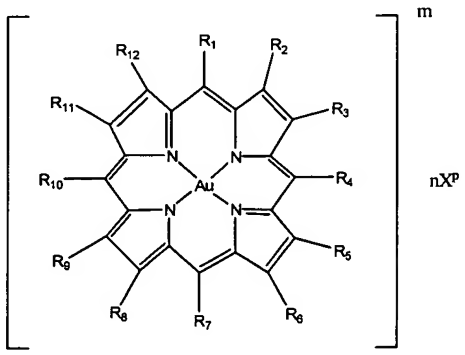
## AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for induction of apoptosis of cancer cells, comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

$R_1$, $R_4$, $R_7$ and $R_{10}$ are each neutral or negatively charged, and are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl, -(6-membered)aryl or -(5 to 10-membered)heteroaryl, each of which may be substituted with one or more -halo, -($C_1$-$C_6$)alkyl, [[-O($C_1$-$C_6$)alkyl]], -$OSO_2$ or [[-$NO_2$]] -$SO_3$;

$R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each independently -H, -($C_1$-$C_6$)alkyl, each of which may be substituted with one or more -C(O)$OR_{13}$, -halo or =O groups;

$R_{13}$ is -($C_1$-$C_6$)alkyl;

each $X^p$ is independently a pharmaceutically acceptable counter-ion;

m is an integer ranging from -3 to 5;

p is an integer ranging from -3 to 3;

n is equal to the absolute value of m/p; and

a pharmaceutically acceptable carrier.

2. (Original) The method of claim 1, wherein $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -H.; $X^p$ is $Cl^-$; m is 1; and n is 1.

3. (Original) The method of claim 2, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -phenyl.

4. (Original) The method of claim 2, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-methylphenyl.

5. (Cancelled).

6. (Original) The method of claim 2, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-bromophenyl.

7. (Original) The method of claim 2, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-chlorophenyl.

8. (Cancelled).

9. (Previously Presented) The method of claim 2, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -pentafluorophenyl.

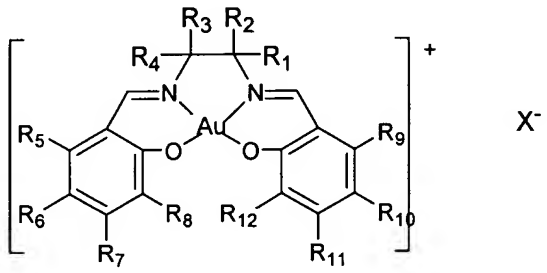
10. (Original) The method of claim 1, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -H; $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -ethyl; $X^p$ is $Cl^-$; m is 1; and n is 1.

11. (Original) The method of claim 1, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -H; and $R_2$ and $R_{11}$ are each -ethyl; $R_3$, $R_5$, $R_9$ and $R_{12}$ are each -methyl; $R_6$ and $R_8$ are each -methyl-3-propanoate; $X^p$ is $Cl^-$; m is 1; and n is 1.

12. (Cancelled).

13. (Previously Presented) The method of claim 1, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-sulfonatophenyl; $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -H; $X^p$ is $Na^+$; m is +3; and n is 3.

14. (Withdrawn) A method for induction of apoptosis of cancer cells comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

$R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

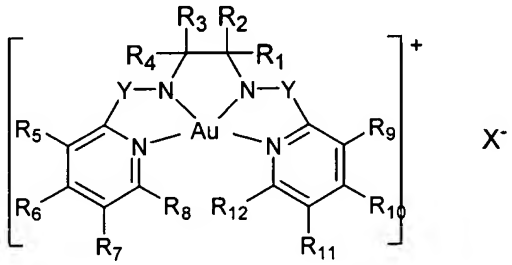
15. (Withdrawn) The method of claim 14, wherein $R_1$-$R_4$ are each -H; and X is $Cl^-$.

16. (Withdrawn) The method of claim 15, wherein $R_5$-$R_{12}$ are each -H.

17. (Withdrawn) The method of claim 15, wherein $R_5$, $R_7$-$R_9$ and $R_{11}$-$R_{12}$ are each -H; and $R_6$ and $R_{10}$ are each -Cl.

18. (Withdrawn) The method of claim 15, wherein $R_5$, $R_7$, $R_9$ and $R_{10}$ are each -H; and $R_6$, $R_8$, $R_{10}$ and $R_{12}$ are each -Cl.

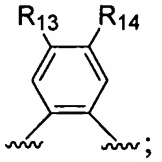
19. (Withdrawn) A method for induction of apoptosis of cancer cells comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:

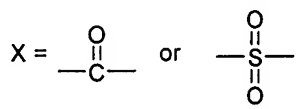



or a pharmaceutically acceptable salt thereof, wherein:

(a) $R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl -O($C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo; or

(b) $R_1$ and $R_4$ are absent; and $R_2$ and $R_3$ together form a 6-membered aryl ring of formula




Y is  ;


$R_{13}$ and $R_{14}$ are each -H or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

20. (Withdrawn) The method of claim 19, wherein

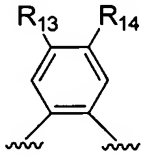
Y is  ; and

X is $Cl^-$.

21. (Withdrawn) The method of claim 20, wherein $R_1$-$R_{12}$ are each -H.

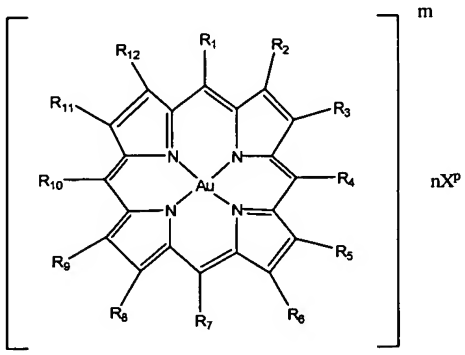
22. (Withdrawn) The method of claim 20, wherein $R_1$-$R_4$ are each -methyl; and $R_5$-$R_{12}$ are each -H.

23. (Withdrawn) The method of claim 20, wherein $R_1$ and $R_4$-$R_{12}$ are each -H; and $R_2$ and $R_3$ are each -phenyl.

24. (Withdrawn) The method of claim 20, wherein $R_1$ and $R_4$ are absent; $R_2$ and $R_3$ together form  ; and

$R_5$-$R_{12}$ are each -H.

25. (Currently amended) A method for inhibition of reverse transcriptase of Human Immunodeficiency virus-1, comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

$R_1$, $R_4$, $R_7$ and $R_{10}$ are each neutral or negatively charged, and are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl, -(6-membered)aryl or -(5 to 10-membered)heteroaryl, each of which may be substituted with one or more -halo, -($C_1$-$C_6$)alkyl, [[-O($C_1$-$C_6$)alkyl]], -$OSO_2$ or [[-$NO_2$]] -$SO_3$;

$R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each independently -H, -($C_1$-$C_6$)alkyl, each of which may be substituted with one or more -C(O)$OR_{13}$, -halo or =O groups;

$R_{13}$ is -($C_1$-$C_6$)alkyl;

each $X^p$ is independently a pharmaceutically acceptable counter-ion;

m is an integer ranging from -3 to 5;

p is an integer ranging from -3 to 3;

n is equal to the absolute value of m/p; and

a pharmaceutically acceptable carrier.

26. (Original) The method of claim 25, wherein $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -H.; $X^p$ is $Cl^-$; m is 1; and n is 1.

27. (Original) The method of claim 26, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -phenyl.

28. (Original) The method of claim 26, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-methylphenyl.

29. (Cancelled).

30. (Original) The method of claim 26, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-bromophenyl.

31. (Original) The method of claim 26, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-chlorophenyl.

32. (Cancelled).

33. (Previously Presented) The method of claim 26, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -pentafluorophenyl.

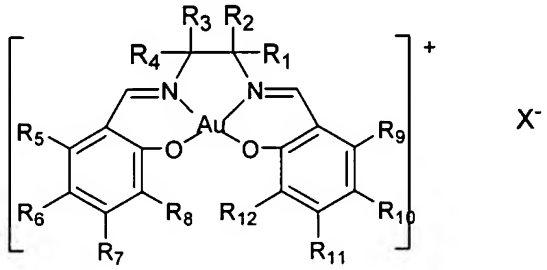
34. (Original) The method of claim 25, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -H; $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -ethyl; $X^p$ is $Cl^-$; m is 1; and n is 1.

35. (Original) The method of claim 25, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -H; and $R_2$ and $R_{11}$ are each -ethyl; $R_3$, $R_5$, $R_9$ and $R_{12}$ are each -methyl; $R_6$ and $R_8$ are each -methyl-3-propanoate; $X^p$ is $Cl^-$; m is 1; and n is 1.

36. (Cancelled).

37. (Previously Presented) The method of claim 25, wherein $R_1$, $R_4$, $R_7$ and $R_{10}$ are each -4-sulfonatophenyl; $R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each -H; $X^p$ is $Na^+$; m is =3; and n is 3.

38. (Withdrawn) A method for inhibition of reverse transcriptase of Human Immunodeficiency virus-1 comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

$R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

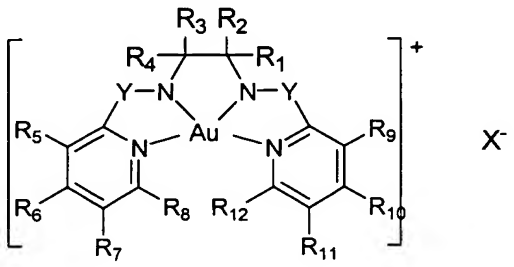
39. (Withdrawn) The method of claim 38, wherein $R_1$, $R_1$', $R_2$ and $R_2$' are each -H; and X is $Cl^-$.

40. (Withdrawn) The method of claim 39, wherein $R_3$-$R_{10}$ are each -H.

41. (Withdrawn) The method of claim 38, wherein $R_3$, $R_5$-$R_7$ and $R_9$-$R_{10}$ are each -H; and $R_4$ and $R_8$ are each -Cl.

42. (Withdrawn) The method of claim 38, wherein $R_3$, $R_5$, $R_7$ and $R_9$ are each -H; and $R_4$, $R_6$, $R_8$ and $R_{10}$ are each -Cl.

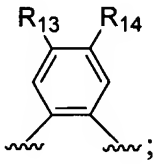
43. (Withdrawn) A method for inhibition of reverse transcriptase of Human Immunodeficiency virus-1 comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of formula:

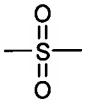



or a pharmaceutically acceptable salt thereof, wherein:

(a) $R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl -O($C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo; or

(b) $R_1$ and $R_4$ are absent; and $R_2$ and $R_3$ together form a 6-membered aryl ring of formula




Y is X =  or  ;

$R_{13}$ and $R_{14}$ are each -H or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

44. (Withdrawn) The method of claim 43, wherein

Y is X =  ; and

X is $Cl^-$.

45. (Withdrawn) The method of claim 44, wherein $R_1$-$R_{12}$ are each -H.

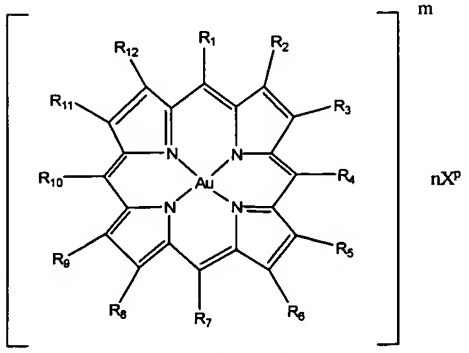
46. (Withdrawn) The method of claim 44, wherein $R_1$-$R_4$ are each -methyl; and $R_5$-$R_{12}$ are each -H.

47. (Withdrawn) The method of claim 44, wherein $R_1$ and $R_4$-$R_{12}$ are each -H; and $R_2$and $R_3$ are each -phenyl.

48. (Withdrawn) The method of claim 44, wherein $R_1$ and $R_4$ are absent; $R_2$ and $R_3$ together form  ; and

$R_5$-$R_{12}$ are each -H.

49. (Withdrawn) A pharmaceutical composition comprising an effective amount of a gold(III) complex of formula:



or a pharmaceutically acceptable salt thereof, wherein:

$R_1$, $R_4$, $R_7$ and $R_{10}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl, -(6-membered)aryl or -(5 to 10-membered)heteroaryl, each of which may be substituted with one or more -halo, -($C_1$-$C_6$)alkyl, -O($C_1$-$C_6$)alkyl, -$OSO_2$ or -$NO_2$;

$R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each independently -H, -($C_1$-$C_6$)alkyl, each of which may be substituted with one or more -C(O)$OR_{13}$, -halo or =O groups;

$R_{13}$ is -($C_1$-$C_6$)alkyl;

each $X^p$ is independently a pharmaceutically acceptable counter-ion;

m is an integer ranging from -3 to 5;

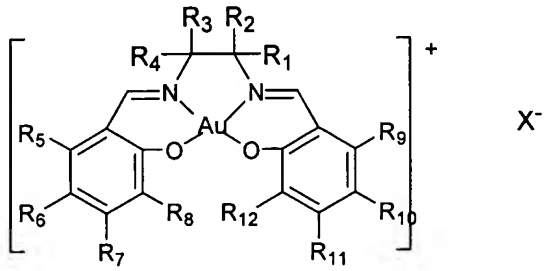
p is an integer ranging from -3 to 3;

n is equal to the absolute value of m/p; and

a pharmaceutically acceptable carrier.

50. (Withdrawn) The composition of claim 49 further comprising 3'-azido-2',3'-dideoxythymidine.

51. (Withdrawn) A pharmaceutical composition comprising an effective amount of a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

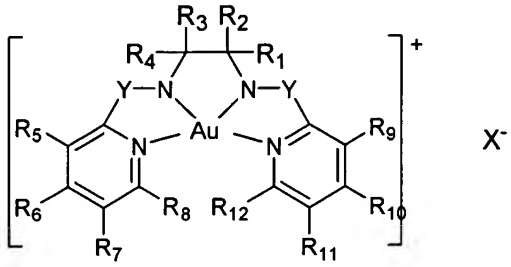
$R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

52. (Withdrawn) The composition of claim 51 further comprising 3'-azido-2',3'-dideoxythymidine.

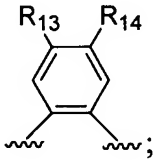
53. (Withdrawn) A pharmaceutical composition comprising an effective amount of a gold(III) complex of formula:

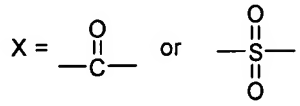


or a pharmaceutically acceptable salt thereof, wherein:

(a) $R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl -O($C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo; or

(b) $R_1$ and $R_4$ are absent; and $R_2$ and $R_3$ together form a 6-membered aryl ring of formula



Y is  ;

$R_{13}$ and $R_{14}$ are each -H or -halo;

X is a counter-anion; and

a pharmaceutically acceptable carrier.

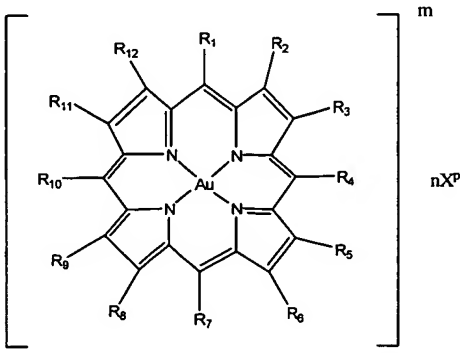
54. (Withdrawn) The composition of claim 53 further comprising 3'-azido-2',3'-dideoxythymidine.

55. (Currently amended) [[A]] The method ~~for inhibition of reverse transcriptase of Human Immunodeficiency virus-1, comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of claim 50~~ of claim 25, wherein said composition further comprises 3'-azido-2',3'-dideoxythymidine.

56. (Withdrawn) A method for inhibition of reverse transcriptase of Human Immunodeficiency virus-1 comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of claim 52.

57. (Withdrawn) A method for inhibition of reverse transcriptase of Human Immunodeficiency virus-1 comprising administering to a patient in need thereof a composition comprising an effective amount of a gold(III) complex of claim 54.

58. (Currently amended) A complex formed between a ligand and a gold(III) complex of formula:




or a pharmaceutically acceptable salt thereof, wherein:

$R_1$, $R_4$, $R_7$ and $R_{10}$ are each neutral or negatively charged, and are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl, -(6-membered)aryl or -(5 to 10-membered)heteroaryl, each of which may be substituted with one or more -halo, -($C_1$-$C_6$)alkyl, [[-O($C_1$-$C_6$)alkyl]], -$OSO_2$ or [[-$NO_2$]] -$SO_3$;

$R_2$, $R_3$, $R_5$, $R_6$, $R_8$, $R_9$, $R_{11}$ and $R_{12}$ are each independently -H, -($C_1$-$C_6$)alkyl, each of which may be substituted with one or more -C(O)$OR_{13}$, -halo or =O groups;

$R_{13}$ is -($C_1$-$C_6$)alkyl;

each $X^p$ is independently a pharmaceutically acceptable counter-ion;

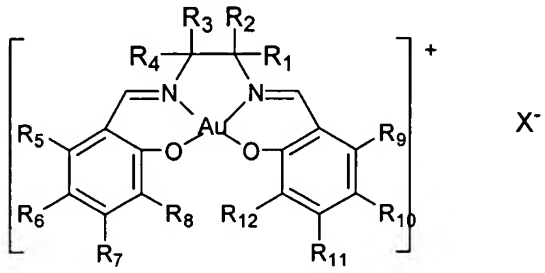
m is an integer ranging from -3 to 5;

p is an integer ranging from -3 to 3; and

n is equal to the absolute value of m/p.

59. (Original) The complex of claim 58, wherein the ligand is selected from the group consisting of porphyrins, metalloporphyrins, amino acids, peptides, polypeptides, proteins, nucleotides, polynucleotides, deoxyribonucleic acid, and ribonucleic acid.

60. (Withdrawn) A complex formed between a ligand and a gold(III) complex of formula:



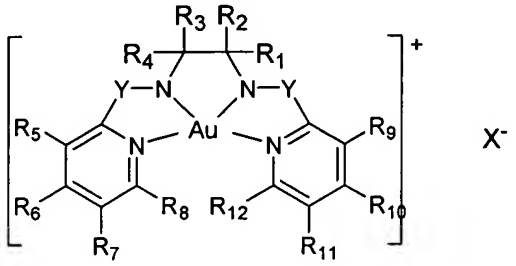

or a pharmaceutically acceptable salt thereof, wherein:

$R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl or -O($C_1$-$C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo; and

X is a counter-anion.

61. (Withdrawn) The complex of claim 60, wherein the ligand is selected from the group consisting of porphyrins, metalloporphyrins, amino acids, peptides, polypeptides, proteins, nucleotides, polynucleotides, deoxyribonucleic acid, and ribonucleic acid.

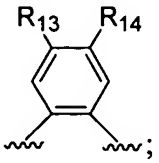
62. (Withdrawn) A complex formed between a ligand and a gold(III) complex of formula:



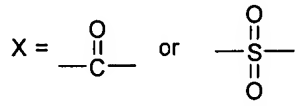

or a pharmaceutically acceptable salt thereof, wherein:

(a) $R_1$- $R_{12}$ are each independently -H, -halo, -($C_1$-$C_6$)alkyl -O($C_6$)alkyl which may be substituted with one or more -O($C_1$-$C_6$)alkyl or -halo; or

(b) $R_1$ and $R_4$ are absent; and $R_2$ and $R_3$ together form a 6-membered aryl ring of formula




;

Y is 

;

$R_{13}$ and $R_{14}$ are each -H or -halo; and

X is a counter-anion.

63. (Withdrawn) The complex of claim 62, wherein the ligand is selected from the group consisting of porphyrins, metalloporphyrins, amino acids, peptides, polypeptides, proteins, nucleotides, polynucleotides, deoxyribonucleic acid, and ribonucleic acid.